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Robin Hill Farm Clay Lane Fishbourne Chichester PO18 8AB	G6445 Tile Barn Farm Barnham	
Date 13/8/21 File G6445 Run 9c Trench.SRC	Designed By AT Checked By	
Micro Drainage	Source Control W.11.2	

Summary of Results for 10 year Return Period (+40%)

Half Drain Time : 1228 minutes

Storm Duration (mins)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m ³)	Status
15 Summer	0.0	0.0	9.0392	0.2392	2.6	O K
30 Summer	0.0	0.0	9.1102	0.3102	3.4	O K
60 Summer	0.0	0.0	9.1842	0.3842	4.1	O K
120 Summer	0.0	0.0	9.2592	0.4592	5.0	O K
180 Summer	0.1	0.1	9.3017	0.5017	5.4	O K
240 Summer	0.1	0.1	9.3297	0.5297	5.7	O K
360 Summer	0.1	0.1	9.3658	0.5658	6.1	O K
480 Summer	0.1	0.1	9.3863	0.5863	6.3	O K
600 Summer	0.1	0.1	9.3978	0.5978	6.5	O K
720 Summer	0.1	0.1	9.4038	0.6038	6.5	O K
960 Summer	0.1	0.1	9.4053	0.6053	6.5	O K
1440 Summer	0.1	0.1	9.3988	0.5988	6.5	O K
2160 Summer	0.1	0.1	9.3808	0.5808	6.3	O K
2880 Summer	0.1	0.1	9.3598	0.5598	6.0	O K
4320 Summer	0.1	0.1	9.3162	0.5162	5.6	O K
5760 Summer	0.1	0.1	9.2742	0.4742	5.1	O K
7200 Summer	0.0	0.0	9.2337	0.4337	4.7	O K
8640 Summer	0.0	0.0	9.1962	0.3962	4.3	O K
10080 Summer	0.0	0.0	9.1607	0.3607	3.9	O K
15 Winter	0.0	0.0	9.0682	0.2682	2.9	O K
30 Winter	0.0	0.0	9.1482	0.3482	3.8	O K
60 Winter	0.0	0.0	9.2312	0.4312	4.7	O K
120 Winter	0.1	0.1	9.3172	0.5172	5.6	O K
180 Winter	0.1	0.1	9.3657	0.5657	6.1	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
15 Summer	82.16	23
30 Summer	53.62	38
60 Summer	33.60	68
120 Summer	20.54	128
180 Summer	15.27	186
240 Summer	12.34	246
360 Summer	9.13	366
480 Summer	7.36	486
600 Summer	6.23	604
720 Summer	5.43	724
960 Summer	4.38	916
1440 Summer	3.22	1144
2160 Summer	2.37	1536
2880 Summer	1.91	1940
4320 Summer	1.40	2772
5760 Summer	1.13	3576
7200 Summer	0.95	4392
8640 Summer	0.83	5184
10080 Summer	0.74	5952
15 Winter	82.16	23
30 Winter	53.62	37
60 Winter	33.60	66
120 Winter	20.54	126
180 Winter	15.27	184

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Storm Duration (mins)	Maximum Filtration (l/s)	Maximum Outflow (l/s)	Maximum Water Level (m OD)	Maximum Depth (m)	Maximum Volume (m ³)	Status
240 Winter	0.1	0.1	9.3988	0.5988	6.5	O K
360 Winter	0.1	0.1	9.4418	0.6418	6.9	O K
480 Winter	0.1	0.1	9.4678	0.6678	7.2	O K
600 Winter	0.1	0.1	9.4843	0.6843	7.4	O K
720 Winter	0.1	0.1	9.4938	0.6938	7.5	O K
960 Winter	0.1	0.1	9.5018	0.7018	7.6	O K
1440 Winter	0.1	0.1	9.4913	0.6913	7.5	O K
2160 Winter	0.1	0.1	9.4693	0.6693	7.2	O K
2880 Winter	0.1	0.1	9.4388	0.6388	6.9	O K
4320 Winter	0.1	0.1	9.3723	0.5723	6.2	O K
5760 Winter	0.1	0.1	9.3072	0.5072	5.5	O K
7200 Winter	0.0	0.0	9.2462	0.4462	4.8	O K
8640 Winter	0.0	0.0	9.1902	0.3902	4.2	O K
10080 Winter	0.0	0.0	9.1387	0.3387	3.7	O K

Storm Duration (mins)	Rain (mm/hr)	Time-Peak (mins)
240 Winter	12.34	242
360 Winter	9.13	360
480 Winter	7.36	474
600 Winter	6.23	588
720 Winter	5.43	702
960 Winter	4.38	920
1440 Winter	3.22	1300
2160 Winter	2.37	1644
2880 Winter	1.91	2108
4320 Winter	1.40	2992
5760 Winter	1.13	3864
7200 Winter	0.95	4688
8640 Winter	0.83	5528
10080 Winter	0.74	6344

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Rainfall Details

Region	ENG+WAL	Shortest Storm (mins)	15
Return Period (years)	10	Longest Storm (mins)	10080
M5-60 (mm)	20.000	Summer Storms	Yes
Ratio-R	0.375	Winter Storms	Yes
Cv (Summer)	0.750	Climate Change %	+40
Cv (Winter)	0.840		

Time / Area Diagram

Total Area (ha) = 0.017

Time from:	(mins) to:	Area (ha)	Time from:	(mins) to:	Area (ha)
0	4	0.000	4	8	0.017

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Infiltration Trench Details

Infil Coef - Base (m/hr)	0.007200	Length (m)	12.0
Infil Coef - Sides (m/hr)	0.007200	Invert Level (m)	8.800
Safety Factor	2.0	Cover Level (m)	10.000
Porosity	0.30	Slope (1:x)	0.0
Width (m)	3.0		